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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

JOLLEY, KIRSTEN

ART UNIT PAPER NUMBER

1762

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/829,292

Applicant(s)

GOTO, KUNIO

Examiner

Kirsten C. Jolley

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 April 2006.  
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.  
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-7 and 18-22 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.  
5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.  
6) ☒ Claim(s) 1-7 and 18-22 is/are rejected.  
7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.  
8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.  
10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☒ Certified copies of the priority documents have been received in Application No. 10/361,556.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)  
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/19/06.  
4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_  
5) ☐ Notice of Informal Patent Application (PTO-152)  
6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Response to Arguments***

1. The claim objections set forth in the prior Office action have been withdrawn in response to Applicant's cancellation of claim 17 and corrections in claims 5 and 20.
2. Applicant's arguments filed April 24, 2006 have been fully considered. The 35 USC 102(b) rejections have been withdrawn in response to Applicant's arguments that claim 1 does not read on a heating step wherein a joint is merely heated to a given temperature, and that the claims taken in light of the specification require a first heating stage at a particular temperature and a second, separate heating stage at another temperature.

With respect to the 35 USC 103(a) rejections, Applicant argues that Tsuru teaches a range of 180-270 C, therefore it would not be obvious to set two different temperature ranges in two stages, one of which is outside that of Tsuru. The Examiner notes that Tsuru teaches a broader temperature range of 150-300 C in col. 1, lines 17-18. Therefore Tsuru's minimum temperature point of 150 C falls within Applicant's first claimed range. Further, Tsuru teaches that "The heating temperature may be arbitrarily determined in accordance with the properties of organic resin binder contained in the solid lubricant." Tsuru et al. also teaches "the method or condition of heating and baking is not limited to the specific example." Therefore it remains the Examiner's position that since multi-stage heating is a well known means for heating and curing coatings in the coating art that it would have been obvious for an engineer having ordinary skill in the art to have used multi-stage heating with the expectation of similar, successful results. The

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prior art references of Emch (US 6,579,575 and US 6,291,027) are cited to demonstrate the conventionality of using multi-stage heating processes for baking and curing organic coatings.

Applicant also argues that the specification has comparative evidence showing that unexpected results are attained when practicing the invention as compared to a single-stage heating process. These showings are convincing that unexpected results are attained in using two heating steps in place of a single step, particularly since Comparative Examples 1 and 2 are performed at heating temperatures of 150 C and 240 C within Tsuru's taught temperature range. However, the Examiner notes that the claims are not commensurate in scope with the showing. MPEP 716.02(d). Applicant claims use of *any* resin and *any* lubricating powder in claim 1, however unexpected results were only demonstrated with use of MoS<sub>2</sub> lubricating powder and polyamideimide or epoxy resin. The claims should be narrowed to reflect the showing of results, or Applicant should provide scientific arguments on the record as to why *all* resins and *all* lubricating powders would achieve similar unexpected results. Further, the experimental results also all comprise pretreatment steps, however these pretreatment steps are not claimed. The pretreatment steps should be claimed in claim 1, or reasoning provided on the record why such pretreatment steps are not necessary in achieving the unexpected results of the invention. In the absence of such a showing of unexpected results *commensurate in scope with the claims*, the 35 USC 103(a) rejections are maintained for the reasons discussed above and in the prior Office action.

***Claim Rejections - 35 USC § 103***

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3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-7 and 18-22 are rejected under 35 U.S.C. 103(a) as obvious over Tsuru et al. (US 6,027,145).

The claims remain rejected for the reasons set forth in the prior Office action, as well as for the reasons discussed above in section 2.

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The prior art references of Emch (US 6,579,575 and US 6,291,027) are cited to demonstrate the conventionality of using multi-stage heating processes for baking and curing organic coatings.

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37


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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kirsten C. Jolley whose telephone number is 571-272-1421. The examiner can normally be reached on Monday to Wednesday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy Meeks can be reached on 571-272-1423. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
Kirsten C Jolley  
Primary Examiner  
Art Unit 1762

kcj